



SLOVENSKI STANDARD SIST EN 50144-2-18:2000

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Safety of hand-held electric motor operated tools - Part 2-18: Particular requirements for laminate trimmers

Safety of hand-held electric motor operated tools -- Part 2-18: Particular requirements for laminate trimmers

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Sicherheit handgeführter motorbetriebener Elektrowerkzeuge -- Teil 2-18: Besondere Anforderungen für Kantenfräsen für Schichtstoffe

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Sécurité des outils électroportatifs à moteur -- Partie 2-18: Règles particulières pour les affleureuses

Ta slovenski standard je istoveten z: EN 50144-2-18:2000

ICS:

25.080.20	Frezalniki	Boring and milling machines
25.140.20	Električna orodja	Electric tools

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 50144-2-18

February 2000

ICS 25.080.20; 25.140.20

Supersedes HD 400.3R S1:1992

English version

**Safety of hand-held electric motor operated tools
Part 2-18: Particular requirements for laminate trimmers**

Sécurité des outils électroportatifs
à moteur
Partie 2-18: Règles particulières
pour les affleureuses

Sicherheit handgeführter motorbetriebener
Elektrowerkzeuge
Teil 2-18: Besondere Anforderungen
an Kantenfräsen für Schichtstoffe

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This European Standard was approved by CENELEC on 2000-01-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

This European Standard has been prepared by Technical Committee TC 61F, Hand-held and transportable electric motor operated tools. The text of the draft was submitted to the Unique Acceptance Procedure (UAP) in August 1996 and was approved by CENELEC as EN 50144-2-18 on 2000-01-01.

This European Standard supersedes HD 400.3R S1:1992.

The following dates were fixed:

- latest date by which the EN has to be implemented at a national level by publication of an identical national standard or by endorsement (dop) 2000-09-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2001-12-01

This standard is divided into two parts:

Part 1: General requirements which are common to most hand-held electric motor operated tools (for the purpose of this standard referred to simply as tools).

Part 2: Requirements for particular types of tool which either supplement or modify the requirements given in Part 1 to account for the particular hazards and characteristics of these specific tools.

This European Standard has been prepared under a mandate given to CEN/CENELEC by the European Commission and the European Free Trade Association and supports the essential health and safety requirements of the Machinery Directive.

Compliance with the clauses of Part 1 together with this Part 2 provides one means of conforming with the essential health and safety requirements of the Directive.

For noise and vibration this standard covers the requirements for their measurement, the provision of information arising from these measurements and the provision of information about the personal protective equipment required. Specific requirements for the reduction of the risk arising from noise and vibration through the design of the tool are not given as this reflects the current state of the art. As with any standard, technical progress will be kept under review so that any developments can be taken into account.

Warning: Other requirements and other EC Directives can be applicable to the products falling within the scope of this standard.

This standard follows the overall requirements of EN 292-1 and EN 292-2.

Subclauses and figures which are additional to those in Part 1 are numbered starting from 101.

NOTE In this European Standard the following print types are used:

- Requirements proper;
- *Test specifications*;
- Explanatory matter.

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1 Scope

This clause of Part 1 is applicable except as follows:

1.1 Addition:

This standard applies to all types of laminate trimmer.

This standard does not cover trimmers designed to be used in conjunction with a support or in any other way as a stationary transportable machine.

This standard does not give requirements for the design of the tool to reduce the risks arising from noise and vibration.

2 Definitions

This clause of Part 1 is applicable except as follows:

2.2.18 Replacement:

2.2.18 **normal load:** The load obtained when the tool is operated intermittently, each cycle comprising a period of continuous operation of 1 min and a rest period of 1 min with the tool switched off. The load applied during the periods of continuous operation shall be such that the input, in watts, is equal to rated input.

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The normal load is based on the rated voltage or on the upper limit of the rated voltage range.

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Additional definitions: [https://standards.iteh.ai/catalog/standards/sist/79f74f64-570e-4139-a329-](https://standards.iteh.ai/catalog/standards/sist/79f74f64-570e-4139-a329-643ebf402889/sist-en-50144-2-18-2000)

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2.2.101 **laminate trimmer:** A tool designed to be fitted with a suitable rotary cutter and an appropriate base for trimming and finishing the edge of plastic laminate sheet, wood veneer or the like, including when they are fixed to a substrate (see Figure 101).

NOTE Laminate trimmers are gripped by only one hand around the body of the tool and do not generally have additional handles or gripping areas.

2.2.102 **fixed base plate:** A height adjustable base plate provided with rollers to guide the tool relative to the work piece. It may be equipped with an attachment for trimming to size two laminate sheets to be butted together (see Figure 102).

2.2.103 **tilt base plate:** A height adjustable base plate provided with pivots to allow cutting at an angle (see Figure 103).

2.2.104 **off-set base plate:** A base plate with a height adjustable cutter where the trimmer spindle is off-set from the motor to get into awkward spaces (see Figure 104).

3 General requirements

This clause of Part 1 is applicable.

4 General notes on tests

This clause of Part 1 is applicable except as follows:

4.11 Addition:

If eddy current brakes are used for applying the load their starting characteristics shall not adversely affect the laminate trimmer under test.

5 Rating

This clause of Part 1 is applicable.

6 Classification

This clause of Part 1 is applicable.

7 Marking and information for use

This clause of Part 1 is applicable except as follows:

7.1 Addition:

Laminate trimmers shall be marked with the maximum no-load speed(s) in revolutions per minute.

7.13.1 Addition:

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- details of the type and shank diameter of cutters for which the tool is designed

7.13.2 Addition:

Instructions shall also include the substance of the following:

- only use cutters of the correct shank diameter and which are suitable for the speed of the tool.

Additional subclause:

7.13.101 The instruction sheet shall also include the following: "Hearing protection should be worn".

8 Protection against electric shock

This clause of Part 1 is applicable.

9 Starting

This clause of Part 1 is applicable.

10 Input and current

This clause of Part 1 is applicable except as follows:

10.1 This subclause of Part 1 is not applicable.

11 Heating

This clause of Part 1 is applicable except as follows:

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11.5 *Modification:*

The tool is operated under normal load for 30 cycles. The temperature rises are measured at the end of the last period of continuous operation.

12 **Leakage current**

This clause of Part 1 is applicable.

13 **Environmental requirements**

This clause of Part 1 is applicable except as follows:

13.1 This subclause of Part 1 is not applicable

13.2.3 *Replacement of paragraphs 1, 2 and 3:*

Laminate trimmers are tested at no load.

Paragraph 4 is not applicable.

13.2.4 *Addition:*

The base plate shall be horizontal.

13.3.7 *Replacement of paragraph 1:*

Laminate trimmers are tested at no load.

Paragraph 3 is not applicable.

14 **Moisture resistance**

This clause of Part 1 is applicable.

15 **Insulation and electric strength**

This clause of Part 1 is applicable.

16 **Endurance**

This clause of Part 1 is applicable.

17 **Abnormal operation**

This clause of Part 1 is applicable.

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18 Mechanical hazards

This clause of Part 1 is applicable except as follows:

18.3 *Replacement:*

The motor housing is considered as the only gripping area and shall be shaped so as to minimize the risk of inadvertent contact of the hand of the user with rotating parts.

Inadvertent contact of the hand of the user is, for example, considered to be sufficiently prevented when the mains switch is at least 120 mm from the cutter, taking into account any base plate which may be fitted.

Compliance is checked by inspection and by measurement.

Additional subclauses:

18.101 Laminate trimmers shall be equipped with either a fixed base plate, a tilt base plate or an off-set base plate. The base plate shall be so designed to prevent the hand holding the trimmer making inadvertent contact with the cutter during normal operation.

Compliance is checked by inspection.

18.102 The maximum speed of the spindle at rated voltage or at the upper limit of the rated voltage range shall not exceed the speed marked on the nameplate.

Compliance is checked by measuring the speed of the spindle after the tool has been operating for 15 minutes with no-load.

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19 Mechanical strength

This clause of Part 1 is applicable.

20 Construction

This clause of Part 1 is applicable except as follows:

Compliance is checked by inspection.

20.21 *Addition:*

Laminate trimmers are considered not to be tools where a considerable amount of dust is produced.

21 Components

This clause of Part 1 is applicable.

22 Internal wiring

This clause of Part 1 is applicable.